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10/023,487	12/18/2001	Jana E. Burton	VTI-9	3646

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

FILE

**Office Action Summary**

Application No.

10/023,487

Applicant(s)

BURTON ET AL.

Examiner

Ula C Ruddock

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 24-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-23, drawn to a composite vapor barrier, classified in class 442, subclass 2.
  - II. Claims 24-32, drawn to a method of making a composite barrier, classified in class 156, subclass 60.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by another process, i.e. by coextruding the first and second facing layers along with the scrim.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Jason Johnston on April 16, 2003, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins (US 6,094,883) in view of Daurer et al. (US 5,540,971). Atkins discloses a safety barrier for roof construction comprising first and second layers of vinyl and metallized polyester with a fiberglass scrim (col 2, ln 35-38). The barrier is preferably a thin film material having a plurality of layers with at least one of the layers being vapor impervious sufficient to provide a roof vapor barrier (col 2, ln 26-28). Atkins fails to disclose that the facing layer is applied with an adhesive coating as required in claim 1. Furthermore, Atkins fails to disclose that the scrim is a triaxial scrim comprising polyester fibers and that the scrim includes a selvage area that contains an additional number of threads.

Daurer et al. (US 5,540,971) disclose an industrial roofing fabric comprising a triaxially wound nonwoven roofing membrane fabric wherein the selvage areas of the fabric have an increased number of warp yarns (abstract). The roofing material consists of a triaxial scrim fabric made of polyester yarns (col 1, ln 48-52). Furthermore, the polyesters yarns of the scrim are coated with a thermoplastic coating to provide good adhesion and to enhance the strength of the roofing material against ripping, tearing, or delamination (col 1, ln 42-47). It should be noted that the Examiner is equating the thermoplastic coating on the polyester yarns of Daurer et al. to the adhesive claimed in the present invention. Therefore, it would have been obvious to one having ordinary skill in the art to use the polyester triaxial scrim of Daurer et al. as the scrim of the Atkins' barrier, motivated by the desire to create a roofing barrier with increased flexibility and strength. Furthermore, it would have been obvious to one having ordinary skill in the art to use the thermoplastic coating of Daurer et al. as an adhesive in the Atkins' barrier, motivated by the desire to create a roofing material having strength against ripping, tearing, or delamination. Finally, it would have been obvious to use the selvage areas as disclosed by Daurer et al. in the roofing barrier of Atkins, motivated by the desire to create a roofing material having increased strength and durability.

The combination of Atkins and Daurer et al. fail to disclose that the scrim has a weight of at least 2 oz/yd<sup>2</sup>, between about 2-8 oz/yd<sup>2</sup>, or 3.0-6.5 oz/yd<sup>2</sup>, or 3-10 oz/yd<sup>2</sup>, or 6-9 oz/yd<sup>2</sup> and the vapor barrier has an average thickness of less than about 0.03 inches, as required in claims 10-15. It should be noted that optimizing the scrim weight and the thickness of the vapor barrier are result effective variables. For example, the heavier the scrim and the thicker the barrier, the stronger the

vapor barrier. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the scrim have a weight of at least 2 oz/yd<sup>2</sup>, between about 2-8 oz/yd<sup>2</sup>, or 3.0-6.5 oz/yd<sup>2</sup>, or 3-10 oz/yd<sup>2</sup>, or 6-9 oz/yd<sup>2</sup> and the vapor barrier have an average thickness of less than about 0.03 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the weight of the scrim and the thickness of the vapor barrier, motivated by the desire to create a roofing vapor barrier having increased strength and durability.

Furthermore, although the combination of Atkins and Daurer et al. do not explicitly teach that the vapor barrier does not substantially rupture when a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches is dropped onto said vapor barrier from a distance of about 42 inches above an upper surface of said vapor barrier, it is reasonable to presume that this property is inherent to the combination of Atkins and Daurer et al. Support for said presumption is found in the use of like materials (i.e. a composite comprising a metallized film, a triaxial polyester scrim, and a vinyl film). The burden is upon Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In addition, the presently claimed property of the vapor barrier not substantially rupturing when a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches is dropped onto said vapor barrier from a distance of about 42 inches above an upper surface of said vapor barrier would obviously have been present once the Atkins and Daurer et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Klaff (US 4,608,298) is believed to be pertinent because it discloses an insulating multi-layered textile composite comprising a vapor barrier, i.e. a metallized film and a polyester scrim, but fails to additionally disclose an adhesive and a vinyl film in the composite.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is (703) 305-0066. The Examiner can normally be reached Monday through Thursday from 6:30 AM to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor Terrel Morris can be reached at (703) 308-2414.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-2351.

Ula C. Ruddock *UCR*  
Patent Examiner  
Art Unit 1771  
4/20/03

*Ula Ruddock*